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APPLICATION NO.	FILIN	G DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/721,528	11/2	4/2003	Danny E. Scott	1684-3739.2US (484-12186-	5325
24247	7590	03/07/2005		EXAM	INER
TRASK BRITT				ASHLEY, BOYER DOLINGER	
P.O. BOX 25	550		•		
SALT LAKE CITY, UT 84110				ART UNIT	PAPER NUMBER
•				3724	

DATE MAILED: 03/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/721,528	SCOTT, DANNY E.				
Office Action Summary	Examiner	Art Unit				
·	Boyer D. Ashley	3724				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 03 Fe	ebruary 200 <u>5</u> .					
<u> </u>	action is non-final.					
Disposition of Claims						
4) ☐ Claim(s) 1-21 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-21 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/o	wn from consideration.					
Application Papers						
9) ☐ The specification is objected to by the Examine 10) ☑ The drawing(s) filed on 24 November 2003 is/a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) ☐ The oath or declaration is objected to by the Ex	re: a)⊠ accepted or b)⊡ object drawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). lected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119		,				
 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list 	s have been received. s have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).	on Noed in this National Stage				
Attachment(s)	_					
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 						
Paper No(s)/Mail Date <u>2/3/05; 11/24/03</u> . 6) Other:						

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DETAILED ACTION

Election/Restrictions

1. Although the examiner does not necessarily agree with applicant's arguments regarding the restriction requirement, the restriction requirement is henceforth withdrawn.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-8 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-16 of U.S. Patent No. 6,655,234. Although the conflicting claims are not identical, they are not patentably distinct from each other because they differ only in claim terminology but encompass the same subject matter, that is, the claims 1-16 of U.S. Patent 6,655,234, anticipate the claim language of the instant application.

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Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 5-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 5, line 1, the expression "a substrate" appears to be a double inclusion of the substrate set forth in claim 1.

In claim 9, line 1, the expression "a superabrasive table" appears to be a double inclusion of the superabrasive table set forth in claim 1.

In claim 13, line 1, the expression "a substrate" appears to be a double inclusion of the substrate set forth in claim 1.

Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 1, 5, 9, 13, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tibbitts, U.S. Patent 5,316,095, in view of UK Patent GB 2,236,699, hereinafter, GB '699, and Quinlan et al., U.S. Patent 4,743,481.

Tibbitts discloses the invention substantially as claimed, including the steps of: forming a substrate of hard material (10/16) with at least one internal cavity

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(22/46/70/68/42'/70') and an attachment surface (the rear of 34 or the rear of 30); attaching a superabrasive table (30) to the attachment surface.

Tibbitts discloses the invention substantially as claimed except for the step of filling the internal cavity with a substantially non-compressible filler material and removing the filler material from the internal cavity after the step of forming the super abrasive table on the attachment surface. However, GB '699 discloses that it is old and well known in the art to introduce filler into hollow cavities prior to further processing for the purpose of preventing contaminants from entering the hollow cavities such that the manufacturing process is enhanced. Further GB '699 further discloses the step of removing the filler after processing. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to use a filler in the internal cavities of the substrate of Tibbitts prior to attaching the super abrasive table on the attachment surface in order to prevent contaminants from entering the internal cavities during the step of attaching the table.

In the alternative, even if it argued that filler material of the modified method of Tibbitts is not noncompressible, Quinlan et al. discloses that it is old and well known in the art to use incompressible filler material for the purpose of supporting performs that are to be subjected high pressures and temperatures as well as removal the filler material after the high pressure/temperature process. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to use an noncompressible filler material with modified method of Tibbitts in order to prevent the filler material from being effected by the high pressure/temperature process.

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As to claim 9, the modified device of Tibbitts discloses as shown in Figure 3 (column 3, lines 29-40, column 5, lines 45-56) a bonding surface (the rear of table 30 attached to substrate 34) with at least one channel formed within the bonding surface (42) with at least one inlet and outlet as shown. Alternatively, the bonding surface could be considered as the rear of substrate 34 with at least one channel (46) formed within the bonding surface with at least one inlet (the rear) and outlet (the front) proximate (proximate defined as close or near) the outer periphery.

As to claims 13, 17, and 21, see Figure 3-3A and the comments above regarding claim 9, it is shown both bit (36), substrate (34), and table (30) all with internal passages, that communicate with each other, having inlets and outlets, wherein the outlets are proximate (near) the outer periphery of the substrate and tables.

8. Claims 2, 6, 10, 14, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tibbitts, in view of GB '699 and Quinlan et al. as applied to claim 1 above and further in view of Heine et al., U.S. Patent 4,802,525.

The modified device of Tibbitts discloses the invention substantially as claimed except for removing the filler material by mechanical means; however, Heine et al. discloses that it is old and well known in the art to use mechanical means with water for the purpose of facilitating the separating of parts after a casting process. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to use a mechanical means in order to remove the filler material from the internal cavity of the modified device of Tibbitts, as taught by Heine et al.

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9. Claims 3-4, 7-8, 11-12, 15-16, and 19-21 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Tibbitts, in view of GB '699 and Quinlan et al. as applied to

claim 1 above and further in view of Alden, U.S. Patent 1,554,697.

The modified device of Tibbitts discloses the invention substantially as claimed

except for the filler material comprising sodium chloride or salt; however, Alden

discloses that it is old and well known in the art to use salt as dissolvable core in the

manufacture of hollow articles for the purpose of readily detaching the core from the

finished product. Therefore, it would have been obvious to use salt as the filler material

in the modified device of Tibbitts in order to facilitate the removal of the filler material.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

11. The prior art references cited but not relied upon were cited to shown similar

devices in the art.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Boyer D. Ashley whose telephone number is 571-272-

4502. The examiner can normally be reached on Monday-Thursday 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Allan N. Shoap can be reached on 571-272-4514. The fax phone number

for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Boyer D. Ashley Primary Examiner Art Unit 3724

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